# SERVICE DOGS OF VIRGINIA
# SPECIAL USE PERMIT APPLICATION PLAN

COLLINS ENGINEERING
200 GARRET STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - OFFICE: 434-293-3719

GRAPHIC SCALE
0 100 200 300
1 INCH = 200 FEET

TMP 48-60A
GREGORY WAYNE WEISIGER & BEVERLY PAGE GORDON
54.51 ACRES
ZONING: RURAL

TMP 48-62B
PIEDMONT MANOR LAND TRUST
75.05 ACRES
ZONING: RURAL

N43°30'W 795.5'

75' MINIMUM FRONT SETBACK

TURKEY SAG ROAD
EX. PUBLIC ROAD (RT. 640)

EXISTING PROPERTY LINE

25' MINIMUM SIDE SETBACK

EXISTING CRITICAL SLOPES

PROPOSED STREAM BUFFER IMPACT FOR ENTRANCE (0.18 ACRES)

PERIMETER VEGETATIVE BUFFER

EXISTING STREAM

N63°15'W 200.0'

N46°45'W 200.0'

TMP 48-61
VICTORIA SEYMOUR
4.11 ACRES
ZONING: RURAL

N35°15'W 161.0'

S31°30'W 1049'

PROPOSED UPPER BUILDING & PARKING ENVELOPE (2.1 ACRES)

LOWER SITE

PROPOSED LOWER BUILDING & PARKING ENVELOPE (1.3 ACRES)

POTENTIAL LOCATION OF WELL

UPPER SITE

500' SETBACK

500' SETBACK

POTENTIAL LOCATION OF SEPTIC FIELD

EXISTING STREAM BUFFER

EXISTING PROPERTY LINE

S20°00'W 266'

EXISTING CRITICAL SLOPES

25' MINIMUM SIDE SETBACK

TMP 48-61B
PEGGY LAW
2.00 ACRES
ZONING: RURAL

MOUNTAIN PROTECTION OVERLAY

S2°00'E 407'

EXISTING CRITICAL SLOPES

S50°00'W 1700.0'

PERIMETER VEGETATIVE BUFFER

35' MINIMUM REAR SETBACK

S35°00'E 545.5'

TMP 48-61C
PEGGY LAW
8.00 ACRES
ZONING: RURAL

LEGEND:

| | |
|---|---|
| PARCEL NUMBER: | 04800-00-00-061D0 |
| LOT NUMBER: | 061D0 |
| ZONING: | RA (RURAL) |
| ACREAGE: | 38.8 ACRES |

- BUILDING ENVELOPE
- PARKING & TRAVELWAY
- PROPERTY LINE
- CRITICAL SLOPES
- STREAM BUFFERS
- MOUNTAIN PROTECTION OVERLAY
- PROPOSED STREAM BUFFER IMPACT
- PERIMETER VEGETATIVE BUFFER
- POTENTIAL LOCATION OF SEPTIC FIELDS
- POTENTIAL LOCATION OF WELLS

REVISED APPLICATION PLAN: 12/4/23

# SERVICE DOGS OF VIRGINIA
# ILLUSTRATIVE PLAN

COLLINS ENGINEERING
200 GARRET STREET, SUITE K - CHARLOTTESVILLE, VA 22902 - OFFICE: 434-293-3719

GRAPHIC SCALE
0 100 200 300
1 INCH = 200 FEET

TMP 48-60A
GREGORY WAYNE WEISIGER & BEVERLY PAGE GORDON
54.51 ACRES
ZONING: RURAL

TMP 48-62B
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75.05 ACRES
ZONING: RURAL

TMP 48-61
VICTORIA SEYMOUR
4.11 ACRES
ZONING: RURAL

TMP 48-61B
PEGGY LAW
2.00 ACRES
ZONING: RURAL

TMP 48-61C
PEGGY LAW
8.00 ACRES
ZONING: RURAL

TURKEY SAG ROAD
EX. PUBLIC ROAD (RT. 640)

EXISTING PROPERTY LINE

75' MINIMUM FRONT SETBACK

25' MINIMUM SIDE SETBACK

35' MINIMUM REAR SETBACK

200' MIN

EXISTING STREAM

PROPOSED ENTRANCE ROAD

PROPOSED CLIENT DORMS

PROPOSED TRAINING & ADMINISTRATIVE BUILDING

PROPOSED ADULT KENNEL BUILDING

LOWER SITE

POTENTIAL LOCATION OF WELL

POTENTIAL LOCATION OF WELL

UPPER PARKING AREA

POTENTIAL LOCATION OF SEPTIC FIELD

PROPOSED PUPPY CENTER

LOWER PARKING AREA

POTENTIAL LOCATION OF SEPTIC FIELD

PROPOSED CARETAKER RESIDENCE

POTENTIAL LOCATION OF WELL

UPPER SITE

200' SETBACK

500' SETBACK

PROPOSED TRAINING BUILDING

PROPOSED 20' WIDE ASPHALT TRAVELWAY

MOUNTAIN PROTECTION OVERLAY

LEGEND:

| | |
|---|---|
| PARCEL NUMBER: | 04800-00-00-061D0 |
| LOT NUMBER: | 061D0 |
| ZONING: | RA (RURAL) |
| ACREAGE: | 38.8 ACRES |

PROPOSED DOG KENNEL & TRAINING FACILITY

| | |
|---|---|
| ADMIN./TRAINING ROOMS | 15,000 SF MAX. |
| PUPPY CENTER | 6,000 SF MAX. |
| CARETAKERS RESIDENCE | 3,000 SF MAX. |
| UPPER TRAINING FACILITY | 10,000 SF MAX. |
| CLIENT DORMS/GUEST ROOMS | 5,000 SF MAX. |
| ADULT KENNEL | 10,000 SF MAX. |
| FEMALE KENNEL | 5,000 SF MAX. |

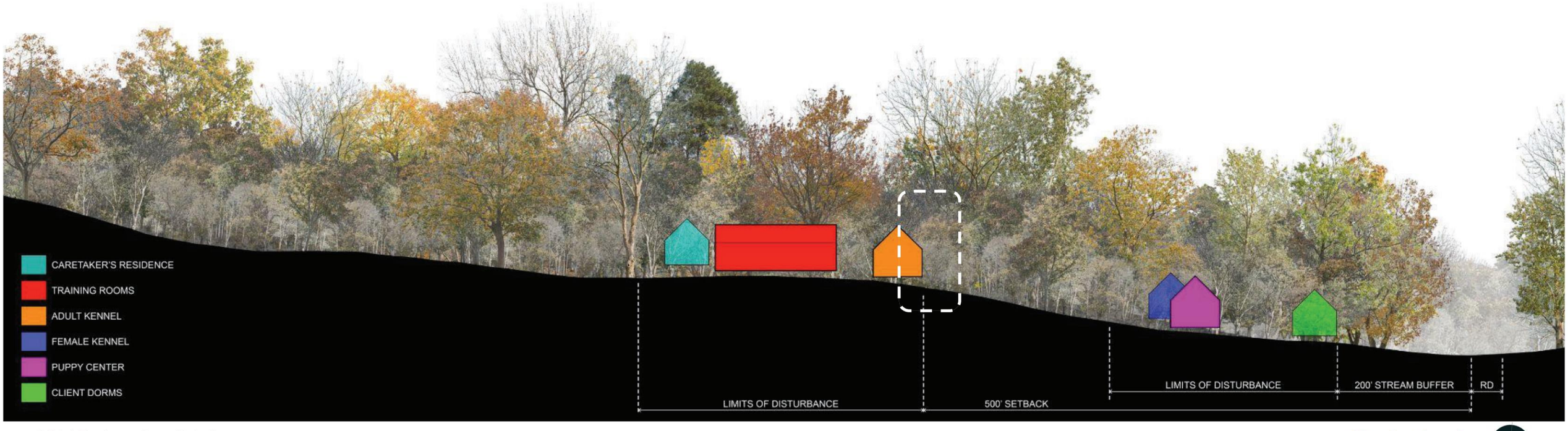
- BUILDING ENVELOPE
- PARKING & TRAVELWAY
- PROPERTY LINE
- CRITICAL SLOPES
- STREAM BUFFERS
- MOUNTAIN PROTECTION OVERLAY
- PERIMETER VEGETATIVE BUFFER (18 ± ACRES)
- POTENTIAL LOCATION OF SEPTIC FIELDS
- POTENTIAL LOCATION OF WELLS

WELL/SEPTIC DESIGN:
(2) SEPTIC FIELDS AND (2) WELLS ARE PROPOSED FOR THE UPPER SITE AREA. THE DOG KENNEL WILL BE ON A SEPARATE WELL AND SEPTIC SYSTEM THAN THE CARETAKERS HOUSE AND PROPOSED TRAINING FACILITY.

(2) SEPTIC FIELDS AND (2) WELLS ARE PROPOSED FOR THE LOWER SITE AREA. THE DORMS AND ADMINISTRATIVE BUILDING WILL BE ON A SEPARATE WELL AND SEPTIC SYSTEM THAN THE PUPPY CENTER.

NO MORE THAN (2) BUILDINGS WILL BE CONNECTED TO A WELL AND SEPTIC FIELD.

REVISED APPLICATION PLAN: 12/4/23




SDV Turkey Sag Rd. Campus

231204 Special Use Permit Diagrams

Site Section 1

DS-14

During construction of a new building a building. The final product is the embodiment of the greenhouse gasses emitted during the construction process. But on day one of completion the building products used in the project begin to deteriorate. There is no building material that can last forever. Time and usage will always wear them down. When buildings reach the end of their "usable" life span they are typically torn down and the material waste is sent to a landfill. Many of those materials are man made products that contain dangerous chemicals that leach into the land

Building are typically thought of in terms of their own lifespans, typically ranging from 30-60 years in the US., but the materials used throughout a building have their own finite lifespans that vary widely depending on where they occur in the building envelope.

## FOUNDATION

### 100+ Years

Given the placement of these building elements below grade the material needs to be resilient and able to stand up to moisture, temperature, and seismic exposures. Typical foundations are cast in place concrete that is buried in the ground and results in significant disruption to the above grade and below grade ecosystems.

## STRUCTURE

### 50+ Years

The term structure is used to encompass a wide range of materials all used to create the framework of a building upon which interior and exterior finishes are applied. This is another relatively inaccessible layer of a building but not to the extent of a typical foundation. In most instances a buildings structure can be removed and reused in another building.

## ENCLOSURE

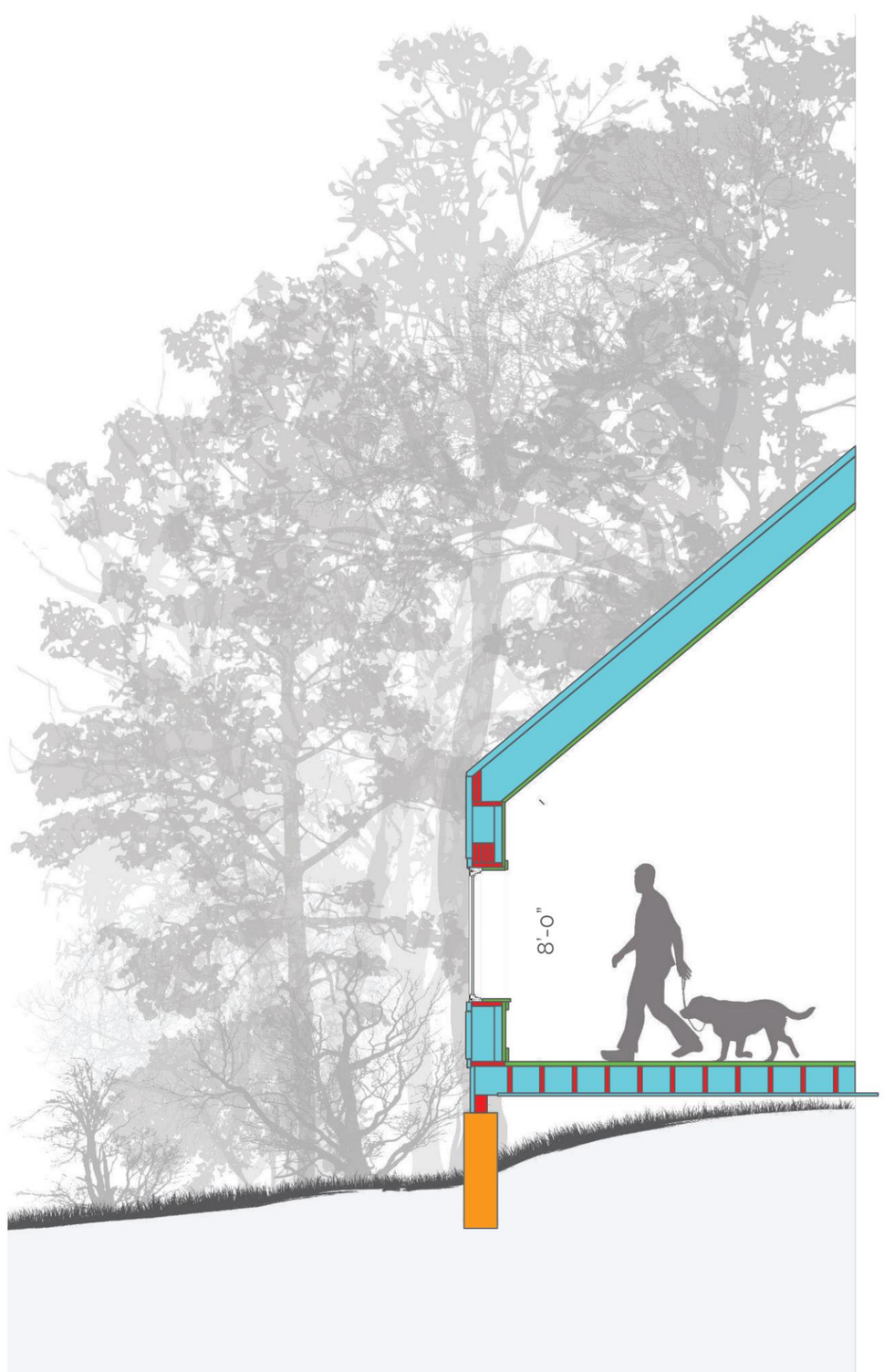
### 30+ Years

Exterior facade elements are designed to resist exposure to nature's elements but even the most robust materials will break down with repeated exposure to sun, precipitation, and wind. It is almost certain that the facade will be renovated or even replaced at least one time during the typical life of a building.

## INTERIORS

### 10+ Years

This term is being used a a catch all for all of the finishes, furniture, and items that are placed in a building for daily use. These are the items with the shortest lifespan due to the wear and tear that we place on them during daily living. The interior of a building will most likely be renovated multiple times during its lifetime.



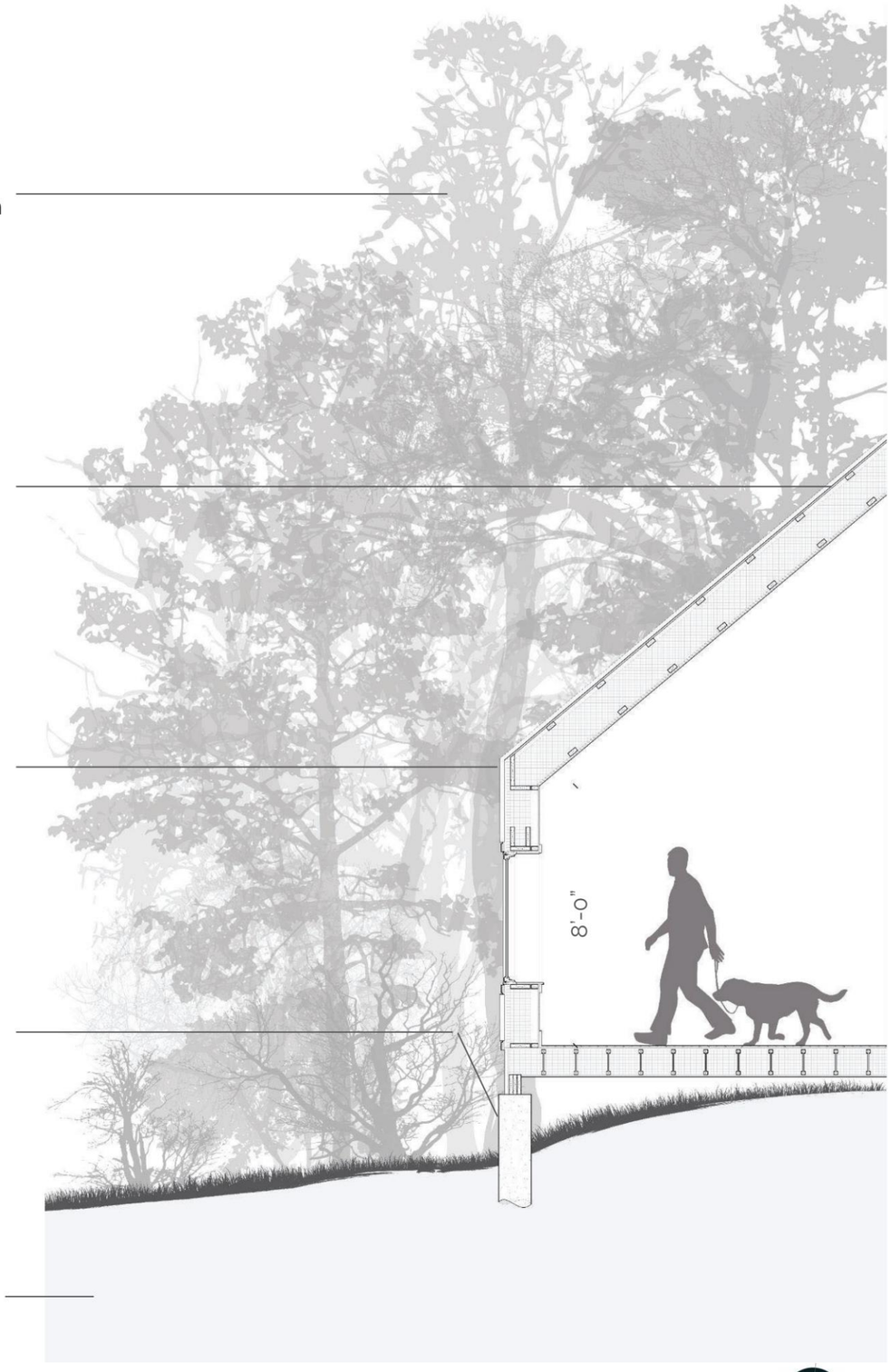
***Existing vegetation outside the limits of disturbance will remain untouched*** and we intend to limit the removal of vegetation within the limits of disturbance to nly the amount needed for efficient construction activities.

By utilizing ***a prefabricated panel system*** we are already prepared for disassembly when the time comes for the buildings to be deconstructed. .

The new buildings on campus will be designed to a r***esidential scale with heights not to exceed 24'-0"*** to ensure they are not visually imposing to the surrounding community.

To minimize below grade disturbance we are also proposing ***shallow pier footings*** as opposed to a spread footing and continuous foundation wall.

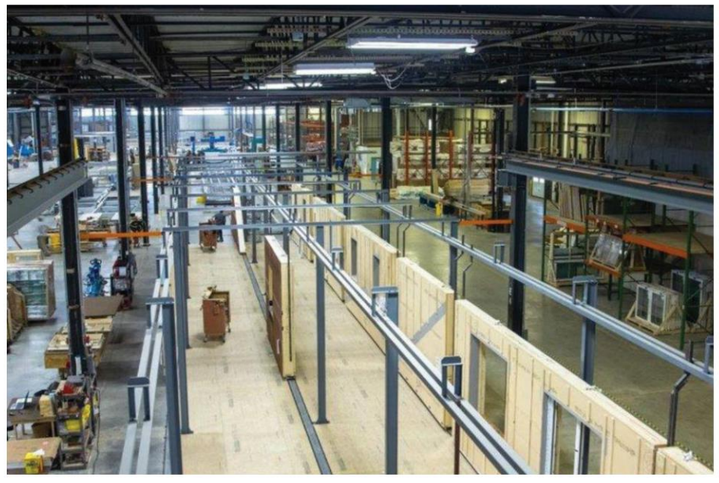
By supporting a structured floor on point loded pier footings we are able to avoid grading large portions of the site. The result is that the building will appear to hover just above the ground and ***the natural landscape will be allowed to exist undisturbed.***



The buildings on the SDV campus are being planned with low impact design principles to ensure that the existing ecosystem and topography are allowed to remain in the most natural state feasible.

To ensure that the design can be reversed we propose a series of strategies that start with the selection of a prefabricated panelized building system called Tektoniks.

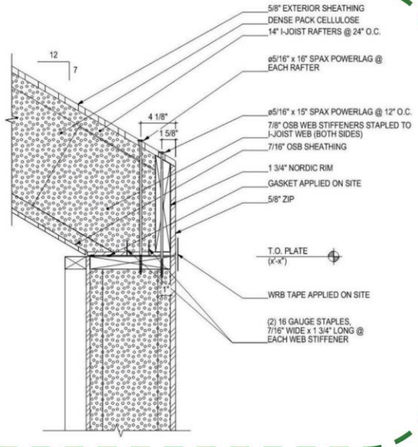
***Tektoniks building enclosures are a system-based solution for high performance multifamily, custom residential, commercial and institutional projects. All systems are produced off-site on automated, precision production lines. Each building system is based on a flexible assembly to help architects, engineers, builders, and developers design and build according to their programming needs and unsurpassing energy performance goals.***



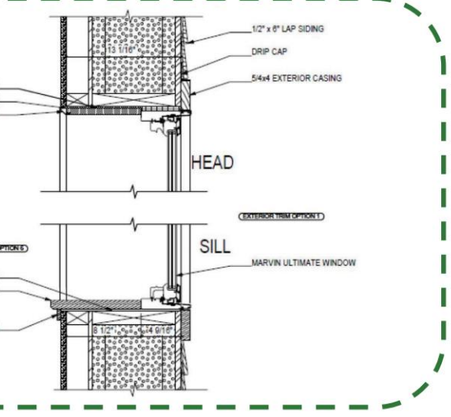
-By utilizing a prefabricated building system we are able to limit the duration and intensity of on site construction activities.

-With the bulk of waste producing construction taking place inside a controlled production facility we are also able to mitigate on site waste from construction activities.

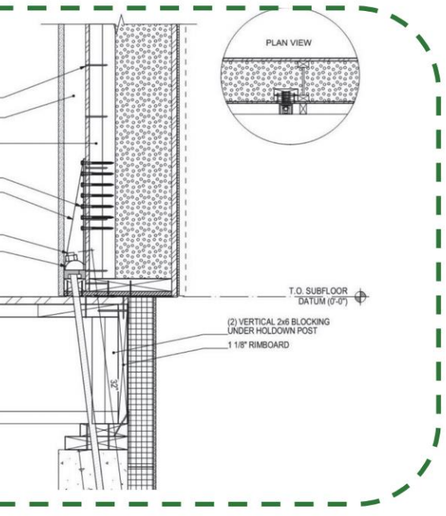
1 | ROOF TO WALL CONNECTION

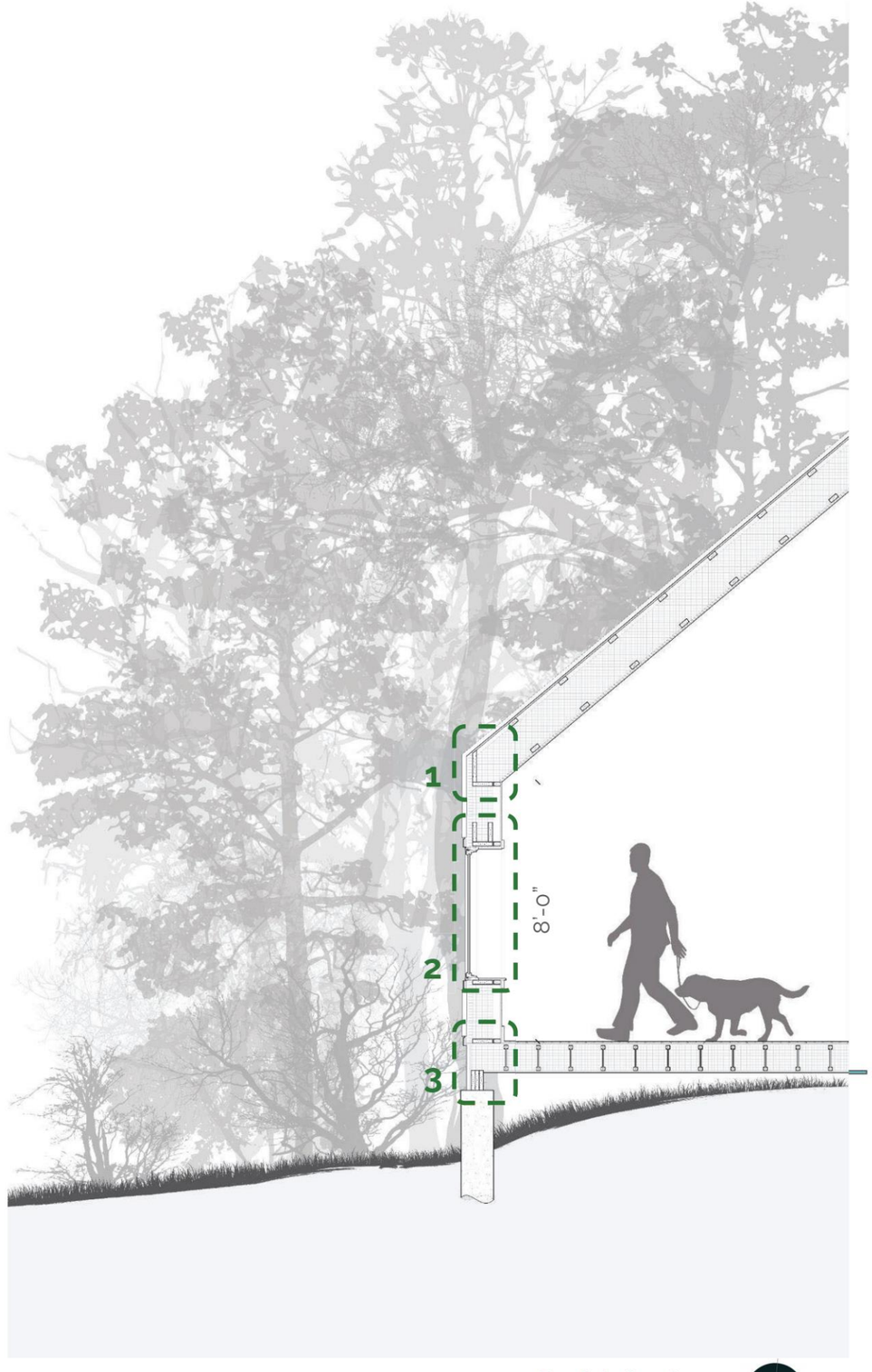



2 | WINDOW INSTALLATION




3 | WALL TO PIER CONNECTION



When planning for disassembly it is critical to consider 5 key principles:

## MATERIALS

Choose materials with properties that ensure they can be reused.

-***Quality*** *Use materials of a high quality that can handle several life cycles.*
-***Healthy*** *Use non-toxic materials to provide a healthy environment — now and in the future.*
-***Pure*** *Use as pure materials as possible, which can recycled with ease.*

## SERVICE LIFE

Design the building with the whole lifetime of the building in mind.

***-Layers*** *Make the long lasting building elements allow for flexibility, so other elements are easily changed.*
***-Flexibility*** *Make a flexible building design that allows the functions to adapt and change in the future.*
***-Interim*** *Think of the building as a temporary composition of materials and design with the preservation of material value in mind.*

## STANDARDS

Design a building the fits into a 'larger context' system.

***-Modularity*** *Use modular systems where elements easily can be replaced.*
***-Prefabrication*** *Use prefabricated elements for a quicker and more secure assembly and disassembly.*
***-Components*** *Create a component when the composition of elements becomes too complex to handle*

## CONNECTIONS

Choose reversible connections that can tolerate repeated assembly and disassembly.

***-Accessible*** *Make the connection accessible in order to minimize assembly and disassembly time.*
***-Mechanical*** *Use mechanical joints for easy assembly and disassembly without damaging the materials.*
***-Dissolvable*** *Avoid binders, but if necessary, use binders that are dissolvable.*

## DECONSTRUCTION

As well as creating a plan for construction, design the building for deconstruction.

***-Strategy*** *Create a simple plan for deconstruction, to ensure a quick and easy disassembly process.*
***-Stability*** *Make sure that stability in the building is maintained during deconstruction.*
***-Environment*** *Ensure the deconstruction plan is respectful to the nearby buildings, people and nature.*

Excerpt from the book BUilding a Circular Future, published by GXN and the Danish Environmental Protectin Agency